

GenCore version 5.1.3
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OM protein - nucleic search, using frame_plus.p2n model

Run on: January 16, 2003, 09:59:22 Search time: 41 1429 seconds
(without alignments)
89.447 Million cell updates/sec

Title: us-09-856-070-21

Perfect score: 60

Sequence: 1 ITEM: RIGVIR 12

Scoring table: BLOSUM62

Xgapop 10.0, Xgapext 0.5

Ygapop 10.0, Ygapext 0.5

Zgapop 6.0, Zgapext 7.0

Delop 6.0, del-ext 7.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 892724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL-frame+p2n.model -DEV-xlp
-Q-/cgn2_6/ftoddata/2/ins/SA_VMR.seq.*
-DB-Issued.patents.NA -QM-fastap -SUFFIX-rni -MINMATCH-0.1 -LOOPEC-0
-LOOPEXT-0 -UNITS-bits -START-1 -END-1 -MAIRIX-blosum62 -TRANS-human40.cdi
-LIST-45 -DOCALIGN-200 -THR SCORE-PCT -THR MAX-100 -THR MIN-0 -ALIGN-15
-MODE-LOCAL -OUTFMT-plo -NORM-ext -HEAPSIZ-500 -MINLEN-0 -MAXLEN-200000000
-USER-US09856070-3C9A-L1-61-runat-14012003-155835-1656 NPG-6 -ICF9-3
-N_XLPXY -NO_MMAPP -LARGEQUERY -NEG_SCORES-0 -WAIT -TANSLOR -DEV-TIMEOUT-120
-WARN_TIMEOUT-30 -THREADS-1 -XGAPOP-10 -XGAPEXT-0.5 -PCGAPOP-6 -PCGAPEXT-7
-XGAPOP-10 -XGAPEXT-0.5 -DELOP-6 -DELEXT-7

Database: Issued.patents.NA.*

- 1: /cgn2_6/ftoddata/2/ins/SA_VMR.seq.*
- 2: /cgn2_6/ftoddata/2/ins/SA_VMR.seq.*
- 3: /cgn2_6/ftoddata/2/ins/SA_VMR.seq.*
- 4: /cgn2_6/ftoddata/2/ins/SA_VMR.seq.*
- 5: /cgn2_6/ftoddata/2/ins/SA_VMR.seq.*
- 6: /cgn2_6/ftoddata/2/ins/SA_VMR.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----|-------------------|
| 1 | 39 | 65.0 | 1068 | 5 | PCT-US91-00899-13 |
| 2 | 39 | 65.0 | 1215 | 5 | PCT-US91-00899-5 |
| 3 | 39 | 65.0 | 1488 | 1 | US-07-914-281-9 |
| 4 | 39 | 65.0 | 1488 | 1 | US-08-525-058A-9 |
| 5 | 39 | 65.0 | 1488 | 2 | US-08-525-058A-9 |
| 6 | 39 | 65.0 | 1488 | 2 | US-08-525-058A-9 |
| 7 | 39 | 65.0 | 1488 | 2 | US-08-525-058A-9 |
| 8 | 39 | 65.0 | 2134 | 2 | US-08-483-151-3 |
| 9 | 39 | 65.0 | 2175 | 4 | US-08-482-073-9 |
| 10 | 39 | 65.0 | 2175 | 4 | US-08-482-073-9 |
| 11 | 39 | 65.0 | 2861 | 4 | US-08-482-073-10 |
| 12 | 39 | 65.0 | 3647 | 1 | US-07-914-281-7 |

| | | | | | | |
|----|----|------|------|---|------------------|-------------------|
| 13 | 39 | 65.0 | 3647 | 1 | US-08-393-246-7 | Sequence 7, Appli |
| 14 | 39 | 65.0 | 3647 | 1 | US-08-525-058A-7 | Sequence 7, Appli |
| 15 | 39 | 65.0 | 3647 | 2 | US-08-525-058A-7 | Sequence 7, Appli |
| 16 | 39 | 65.0 | 3647 | 4 | US-09-042-531-7 | Sequence 7, Appli |
| 17 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 18 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 19 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 20 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 21 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 22 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 23 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 24 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 25 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 26 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 27 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 28 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 29 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 30 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 31 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 32 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 33 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 34 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 35 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 36 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 37 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 38 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 39 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 40 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 41 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 42 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 43 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 44 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |
| 45 | 39 | 65.0 | 3647 | 5 | PCT-US91-00899-4 | Sequence 4, Appli |

ALIGNMENTS

RESULT 1

PCT-US91-00899-13

Sequence 13, Application PC/US9100899

GENPAT INFORMATION:

APPLICANT: Lowe, John B.

TITLE OF INVENTION: Method and Products For the Synthesis of

TITLE OF INVENTION: Oligosaccharide Structures on Glycoproteins, Glycolipids,

TITLE OF INVENTION: or as Free Molecules, and For the Isolation of Cloned

TITLE OF INVENTION: Genetic Sequences That Determine These Structures

NUMBER OF SEQUENCES: 16

CORRESPONDENCE ADDRESS:

ADDRESSEE: GREEN, SPIVAK, McLELLAN, MATHER & NEUSTADT,

ADDRESS: P.O.

STREET: 1755 Bellvue Davis Highway, Suite 400

CITY: Arlington

STATE: Virginia

ZIP: 22202

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US91/00899

FILING DATE: 19910214

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Lavalleye Ph.D., Jean-Paul

REGISTRATION NUMBER: 31,451

REFERENCE/PATENT NUMBER: 2363 021-55 PCT

TELEPHONE: (703)521-5940

TELEFAX: (703)486-2347

TELEX: 248855 GPAT CR

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

LENGTH: 1068 base pairs
 TYPE: NUCLEIC ACID
 STRANDEDNESS: double
 TOPOLOGY: unknown
 MOLECULE TYPE: DNA (genomic)
 HYPOTHEetical: NO
 PCT-US91-00899-13

Alignment Scores:
 Pred. No.: 21.5 Length: 1068
 Score: 39.00 Matches: 8
 Percent Similarity: 84.33% Conservatives: 2
 Best Local Similarity: 66.67% Mismatches: 2
 Query Match: 65.00% Indels: 0
 DB: 5 Gaps: 0

US 09 856-070-21 (1 12) x PCT US91 00899 13 (1 1068)

QY 1 GluGluLeuMetLeuArgLeuGlnAspTyrGluGlu 12
 Db 456 GAGAGGTGGATGTGGGTGTGGTGAATAGAGAG 244

RESULT 2

PCT US91-00899-5
 Sequence 5, Application PCT/US91/00899

GENERAL INFORMATION:

APPLICANT: LOWE, JOHN B.
 TITLE OF INVENTION: Method and Products for the Synthesis of
 TITLE OF INVENTION: oligosaccharide Structures on Glycoproteins, Glycolipids,
 TITLE OF INVENTION: or as Free Molecules, and for the Isolation of Cloned
 TITLE OF INVENTION: Genetic Sequences that Determine these Structures

NUMBER OF SEQUENCES: 16

CORRESPONDENCE ADDRESS:

ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MATER & NEUSTADT,

ADDRESSEE: P.C.

STREET: 1755 Jefferson Davis Highway, Suite 400

CITY: Arlington

STATE: Virginia

ZIP: 22202

COUNTRY: U.S.A.

COMPUTER READABLE FORM:

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US91/00899

FILING DATE: 19910214

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Lavalleye Ph.D., Jean-Paul

REGISTRATION NUMBER: 31,451

REFERENCE/DOCKET NUMBER: 2363-021-55 PCT

TELECOMMUNICATION INFORMATION:

TELEPHONE: (703) 521-5940

TELEFAX: (703) 486-2347

TELEX: 248855 OPAL UR

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 1215 base pairs

TYPE: NUCLEIC ACID

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: DNA (genomic)

PCT US91-00899-5

Alignment Scores:
 Pred. No.: 25.1 Length: 1215
 Score: 39.00 Matches: 8
 Percent Similarity: 84.33% Conservatives: 2
 Best Local Similarity: 66.67% Mismatches: 2
 Query Match: 65.00% Indels: 0
 DB: 5 Gaps: 0

US-09-856-070-21 (1-12) x PCT-US91-00899 5 (1 1215)

QY 1 GluGluLeuMetLeuArgLeuGlnAspTyrGluGlu 12
 Db 406 GAGAGGTGGATGTGGGTGTGGTGAATAGAGAG 441

RESULT 3

US-07-914-281-9

Sequence 9, Application US/07914281

Patent No. 5324663

GENERAL INFORMATION:

APPLICANT: LOWE, JOHN B.

TITLE OF INVENTION: METHODS AND PRODUCTS FOR THE SYNTHESIS

TITLE OF INVENTION: OF OLIGOSACCHARIDE STRUCTURES ON GLYCOPROTEINS,

TITLE OF INVENTION: GLYCOLIPIDS, OR AS FREE MOLECULES, AND FOR THE ISOLATION

TITLE OF INVENTION: OF CLONED GENETIC SEQUENCES THAT DETERMINE THESE STRUCTU

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MATER & NEUSTADT,

ADDRESSEE: P.C.

STREET: 1755 Jefferson Davis Highway, Fourth Floor

CITY: Arlington

STATE: Virginia

COUNTRY: U.S.A.

ZIP: 22202

COUNTRY: U.S.A.

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07914,281

FILING DATE: 19920720

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: Lavalleye, Jean-Paul M. P.

REGISTRATION NUMBER: 31,451

REFERENCE/DOCKET NUMBER: 2363-060-55

TELECOMMUNICATION INFORMATION:

TELEPHONE: (703) 521-4500

TELEFAX: (703) 486-2347

TELEX: 248855 OPAL UR

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 1488 base pairs

TYPE: NUCLEIC ACID

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: DNA (genomic)

US-07-914-281-9

Alignment Scores:
 Pred. No.: 31.9 Length: 1488
 Score: 39.00 Matches: 8
 Percent Similarity: 84.33% Conservatives: 2
 Best Local Similarity: 66.67% Mismatches: 2
 Query Match: 65.00% Indels: 0
 DB: 1 Gaps: 0

US-09-856-070-21 (1-12) x US-07-914-281-9 (1-1488)

QY 1 GluGluLeuMetLeuArgLeuGlnAspTyrGluGlu 12
 Db 679 GAGAGGTGGATGTGGGTGTGGTGAATAGAGAG 714

RESULT 4

US-08-193-246-9

Sequence 9, Application US/08393246

Patent No. 5595900

GENERAL INFORMATION:

APPLICANT: LOWE, JOHN B.

TITLE OF INVENTION: METHODS AND PRODUCTS FOR THE SYNTHESIS

TITLE OF INVENTION: OF OLIGOSACCHARIDE STRUCTURES ON GLYCOPROTEINS,

TITLE OF INVENTION: GLYCOPOLIPIDS, OR AS FREE MOLECULES, AND FOR THE ISOLATION
 NUMBER OF SEQUENCES: 14
 CORRESPONDENT'S ADDRESS:

ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,

STREET: 1755 Jefferson Davis Highway, Fourth Floor

CITY: Arlington

STATE: Virginia

COUNTRY: U.S.A.

ZIP: 22202

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/393,246

FILING DATE:

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/220,433

FILING DATE: 30-MAR-1994

APPLICATION NUMBER: US 07/914,281

FILING DATE: 20-JUL-1992

ATTORNEY/AGENT INFORMATION:

NAME: Lavalleye, Jean-Paul M. P.

REGISTRATION NUMBER: 31,451

REFERENCE/DOCKET NUMBER: 2363-060-55

TELECOMMUNICATION INFORMATION:

TELEPHONE: (703)521-4500

TELEFAX: (703)486-2447

TELEX: 248855 GPAT UR

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 1488 base pairs

TYPE: nucleic acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: DNA (genomic)

US-08-393-246-9

Alignment Scores:

| Prod. No.: | Length: | 1488 |
|------------------------|---------|-----------------|
| Score: | 31.9 | Matches: 8 |
| Percent Similarity: | 83.33% | Conservative: 2 |
| Best Local Similarity: | 56.57% | Mismatches: 2 |
| Query Match: | 65.00% | Indels: 0 |
| DB: | 1 | Gaps: 0 |

US-09-856-070-21 (1-12) x US 08 393 246 9 (1-1488)

QY 1 GluGluLeuMetLeuArdLeuGluAspTyrGluGlu 12

DB 679 GAGGAGGTGGATCGCGGCTGTGTGGACTACGAGGAG 714

RESULT 5

US-08-525-058A-9

Sequence 9, Application US/08/525058A

Patent No. 5770420

GENERAL INFORMATION:

APPLICANT: LOWE, JOHN B.

TITLE OF INVENTION: METHODS AND PRODUCTS FOR THE SYNTHESIS

OF OLIGOSACCHARIDE STRUCTURES ON GLYCOPROTEINS.

TITLE OF INVENTION: GLYCOPOLIPIDS, OR AS FREE MOLECULES, AND FOR THE ISOLATION

OF CLONED GENETIC SEQUENCES THAT DETERMINE THESE STRUCTURES

NUMBER OF SEQUENCES: 23

CORRESPONDENCE ADDRESS:

ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.

STREET: 1755 Jefferson Davis Highway, Fourth Floor

CITY: Arlington

STATE: Virginia

COUNTRY: U.S.A.

ZIP: 22202

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/525,058A

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Lavalleye, Jean-Paul M. P.

REGISTRATION NUMBER: 31,451

REFERENCE/DOCKET NUMBER: 2363-060-55

TELECOMMUNICATION INFORMATION:

TELEPHONE: (703)521-4500

TELEFAX: (703)486-2347

TELEX: 248855 GPAT UR

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 1488 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

US-08-525-058A-9

Alignment Scores:

| Prod. No.: | Length: | 1488 |
|------------------------|---------|-----------------|
| Score: | 31.9 | Matches: 8 |
| Percent Similarity: | 83.33% | Conservative: 2 |
| Best Local Similarity: | 56.57% | Mismatches: 2 |
| Query Match: | 65.00% | Indels: 0 |
| DB: | 1 | Gaps: 0 |

US-09-856-070-21 (1-12) x US-08 525 058A 9 (1-1488)

QY 1 GluGluLeuMetLeuArdLeuGluAspTyrGluGlu 12

DB 679 GAGGAGGTGGATCGCGGCTGTGTGGACTACGAGGAG 714

RESULT 6

US-08-696-731-9

Sequence 9, Application US/08/696731

Patent No. 595347

GENERAL INFORMATION:

APPLICANT: LOWE, JOHN B.

TITLE OF INVENTION: METHODS AND PRODUCTS FOR THE SYNTHESIS

OF OLIGOSACCHARIDE STRUCTURES ON GLYCOPROTEINS.

TITLE OF INVENTION: GLYCOPOLIPIDS, OR AS FREE MOLECULES, AND FOR THE ISOLATION

OF CLONED GENETIC SEQUENCES THAT DETERMINE THESE STRUCTURES

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,

STREET: 1755 Jefferson Davis Highway, Fourth Floor

CITY: Arlington

STATE: Virginia

COUNTRY: U.S.A.

ZIP: 22202

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/696,731

FILING DATE: 14-AUG-1996

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/393,246

FILING DATE:

APPLICATION NUMBER: US 08/220,433

Search completed: January 16, 2003, 21:41:28
Job time : 43.1429 secs